

IN THE CLAIMS:

By this amendment, claim 2 is cancelled and claims 30-62, which are the subject of the restriction requirement of paper 20040712, are also cancelled without diminution or disclaimer of the indicated subject matter. Applicants note the right of the Applicants to amend the canceled claims back into the application if a bridging claim is found allowable (MPEP§ 809.02) and to file any divisional and/or continuation applications in accord with 37 C.F.R 1.53(b) and MPEP §§ 201.11, 201.06(c). Claims 1, 3-6, 10-12, 15-20, and 26-27 stand currently amended, claims 7-9, 13, 15, and 21-25 stand as originally presented, and claims 63-65 are newly added. This listing of claims will replace all prior versions, and listings, of claims in the application:

CLAIMS LISTING:

1. (Currently Amended) A multiple battery system operating an electrical system comprising:
a main battery having a main positive output and a main negative output;
at least one auxiliary standby battery having an at least one auxiliary standby positive output and
an at least one auxiliary standby negative output; and
a main electrical circuit comprising a coupling of a common positive terminal with an at least
one switching device, the at least one switching device having at least two operating positions to
selectively couple the main and/or the at least one auxiliary standby battery to the common
positive terminal to operate the electrical system, wherein a first operating position of the at least
two operating positions provides electrical charge to both the main battery and the at least one
auxiliary positive output is coupled to the common positive terminal and the main battery
operates the electrical system and an at least one one-way charging circuit is coupled to the

common positive terminal and the positive output of the standby battery providing recharging to at least one of the at least one standby battery; and

a controller coupled to the main electrical circuit and switching said at least one switching device based on input from an at least one sensor.

Cancel claim 2

3. (Currently Amended) The multiple battery system of claim 21, further comprising a second operating position wherein the common positive terminal is coupled through the at least one switching device directly to the a point in the main electrical circuit, beyond the one way charging circuit, that couples to the auxiliary standby positive output.

4. (Currently Amended) The multiple battery system of claim 3, wherein the main battery is electrically isolated from the at least one auxiliary standby battery in the second operating position of the at least two operating positions of the at least one switching device.

5. (Currently Amended) The multiple battery system of claim 3, wherein only the coupling of the positive output of the main battery and/or the positive output of the at least one auxiliary standby battery are switched by the switching device.

6. (Currently Amended) The multiple battery system of claim 3, wherein the second operating position of the at least two operating positions electrically isolates the main battery from the system and introduces only the at least one auxiliary standby battery.

7. (Original) The multiple battery system of claim 3, wherein the controller further comprises an at least one indicator element.

8. (Original) The multiple battery system of claim 7, wherein the at least one indicator element is at least one of a klaxon, a horn, a light, a plurality of lights, an LCD panel, a simulated human voice, a human voice, a light emitting diode, a plurality of light emitting diodes.

9. (Original) The multiple battery system of claim 3, wherein the at least one indicator element is a plurality of indicator elements having at least one of a red, orange, green, or amber color.
10. (Currently Amended) The multiple battery system of claim 3, wherein the battery system further comprises a battery housing with a main battery compartment containing the main battery and an at least one auxiliarystandby battery compartment containing the at least one auxiliarystandby battery.
11. (Currently Amended) The multiple battery system of claim 10, wherein the main battery compartment is located atop the at least one auxiliarystandby battery compartment.
12. (Currently Amended) The multiple battery system of claim 3, wherein the main battery compartment is located aside the at least one auxiliarystandby battery compartment.
13. (Original) The multiple battery system of claim 3, wherein the one-way charging circuit comprises an at least one one-way charging diode.
14. (Currently Amended) The multiple battery system of claim 13, wherein the at least one one-way charging diodecircuit further comprises an at least one silicon rectifier.
15. (Original) The multiple battery system of claim 13, wherein the at least one one-way charging circuit further comprises an at least one Silicon Controlled Rectifier (SCR).
16. (Currently Amended) The multiple battery system of claim 15, wherein the at least one Silicon Controlled Rectifier (SCR) is coupled to the controller and disables the coupling with the at least one auxiliarystandby battery upon receiving a signal from the controller.
17. (Currently Amended) The multiple battery system of claim 3, wherein the at least one auxiliarystandby battery comprises a single auxiliarystandby battery.
18. (Currently Amended) The multiple battery system of claim 3, wherein the at least one battery comprises a plurality of auxiliarystandby batteries.

19. (Currently Amended) The multiple battery system of claim 15, wherein the at least one sensor further comprises an at least one of: an at least one main battery voltage sensor, an at least one main battery amperage sensor, an at least one auxiliarystandby battery voltage sensor, an auxiliarystandby battery amperage sensor, an at least one switch position sensor.

20. (Currently Amended) The multiple battery system of claim 3, wherein the controller further comprises at least one of: an at least one microprocessor, an at least one signal processor, an at least one set of lookup tables, an at least one memory device, an at least one security protocol/encryption element, and an at least one indicator element.

21. (Original) The multiple battery system of claim 3, wherein the controller is a wireless controller system.

22. (Original) The multiple battery system of claim 21, wherein the wireless controller system further comprises a wireless controller, a wireless transceiver, and an input device.

23. (Original) The multiple battery system of claim 22, wherein the input device is a wireless input device and further comprises an at least one indicator element.

24. (Original) The multiple battery system of claim 3, wherein the controller is a network interfaceable controller, the network interfaceable controller further comprising a network interface and transceiver.

25. (Original) The multiple battery system of claim 24, wherein the network interfaceable controller is in communication with a Network Operations Center (NOC) via a network.

26. (Currently Amended) The multiple battery system of claim 25, wherein the network interfaceable controller couples to and communicates with the at least one switching device to detect the position of the at least one switching device and selectively engages the at least one switching device based on the input of at least one of an at least one main battery voltage sensor,

an at least one main battery amperage sensor, an at least one ~~auxiliary~~standby battery voltage sensor, and an at least one ~~auxiliary~~standby amperage sensor.

27. (Currently Amended) The multiple battery system of claim 3, wherein the controller includes a trigger that signals the controller to periodically change the switch position of the at least one switching device so as to discharge the at least one ~~auxiliary~~standby battery in the second operating position of the at least two operating positions for short periods of time and then switches back to the first operating position of the at least two operating positions.

28. (Original) The multiple battery system of claim 26, further comprising an at least one VI sensor.

29. (Original) The multiple battery system of claim 3, wherein the multiple batteries are part of an at least one of a six-volt, a twelve-volt, a fourteen-volt, and a twenty-four volt battery electrical system.

30-62. CANCELED

63. (New) The multiple battery system of claim 1, wherein in the first operating position of the at least two operating positions, the main battery is engaged and operates the electrical system and the at least one one-way charging circuit simultaneously recharges the standby battery without permitting the standby battery to be engaged to operate the electrical system or electrically couple to the main battery.

64. (New) The multiple battery system of claim 30, wherein in the second of the at least two operating positions, the main battery and the one-way charging circuit are electrically isolated from the standby battery and the standby battery is engaged to operate the electrical system.

65) (New) A multiple battery system operating an electrical system comprising:

a common positive terminal and a common negative terminal coupled to the electrical system;

an at least two batteries, each of the at least two batteries having a positive output and a negative output;

an at least one switching device with at least two operating positions, the at least one switching device switching the common positive terminal to one of the positive outputs of the at least two batteries, preventing current flow from any of the remaining at least two batteries to the common positive terminal;

a one way charging circuit charging at least one of the remaining at least two batteries not coupled to the common positive terminal in one of the at least two operating positions; and

a controller to operate the at least one switching device and to switch between the at least two operating positions based on inputs from an at least one sensor.